

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

2

AMENDMENTS TO THE CLAIMS:

1. (Previously presented) A computer-implemented method of automatically generating a story, comprising:
 - selecting a theme of said story;
 - examining elements of said theme and instantiating said theme;
 - using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events;
 - inputting said elements of said theme into a stage, said stage being a collection of elements of said story and their interrelationships; and
 - inputting the stage into a simulation engine to play out a series of events over time, thereby to generate a plot, said plot including characters, their characteristics, and their respective interactions, and a history of events and their temporal relationships, said simulation engine including a predetermined randomness such that random elements from said databases are selected.
2. (Canceled).
3. (Previously presented) The method according to claim 1 further comprising:
 - developing a scenario, including a plurality of activities, based on said plot generated, such that details of said activities are developed and bridged.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

3

4. (Original) The method according to claim 3, wherein said scenarios are in a formal, logic based language independent of a spoken language, said method further comprising:

inputting said scenarios into a natural language generator such that said scenarios are converted from said logic-based language to a natural language, said natural language being a spoken language understandable by a human reader, said conversion from said logic-based language to said natural language influencing at least one of story grammars, literary constraints, words, phrases, and sentence structure used in said scenario.

5. (Original) The method according to claim 4, further comprising:
generating a story based on an input from said language generator.

6. (Original) The method according to claim 3, further comprising:
generating a story based on an input from said language generator.

7. (Original) The method according to claim 6, further comprising:
selecting a story structure while said story is being generated such that a sequence of said story is selectively changeable.

8. (Original) The method according to claim 7, further comprising:
expanding said story according to said story structure selected.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

4

9. (Original) The method according to claim 8, further comprising:
generating a story outline based on said story expansion.
10. (Previously presented) The method according to claim 1, further comprising:
generating a story based on an input from a language generator.
11. (Original) The method according to claim 1, wherein a user selectively constrains said process at any of a plurality of predetermined steps of said process, such that said user may select a theme from a database of themes and a plot from a plot database, such that user can anchor the story to said choices made by the user.
12. (Original) The method according to claim 1, wherein said theme is selected from a plurality of themes stored in a database.
13. (Original) The method according to claim 1, wherein said theme is captured such that said theme influences other processes but are independent of said processes of the story generation.
14. (Original) The method according to claim 1, wherein said theme is captured and stored in a database in advance by forming a formal expression in a formal language using primitive elements provided in a thematic knowledge base.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

5

15. (Previously presented) The method according to claim 1, further comprising:
identifying various classes of knowledge, a set of computational entities and their interactions for building creative agents for produce random, interesting artifacts in a particular language.
16. (Previously presented) The method according to claim 1, further comprising:
identifying various system components, their roles and interactions in an architecture for computational creativity.
17. (Previously presented) The method according to claim 1, further comprising:
identifying a notion of thematic knowledge and its role in an architecture for computational creativity.
18. (Previously presented) The method according to claim 1, further comprising identifying a process of thematic instantiation and its role in an architecture for computational creativity.
19. (Previously presented) The method according to claim 1, further comprising:
identifying the role of class of knowledge in computational creativity called impressionistic knowledge.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

6

20. (Previously presented) The method according to claim 1, further comprising:
identifying man machine interfaces points for controlling a creative process executed by
said system.
21. (Original) The method according to claim 1, wherein said story generation is theme based
such that said theme is selected first to constrain choices made in generating said story and to
ensure that said story is about said theme.
22. (Original) The method according to claim 1, further comprising:
using literary devices in generating said story so as to influence a literary style of said
story.
23. (Original) The method according to claim 22, wherein said literary devices include a
choice of words and phrase used in conveying events of said story to convey a psychological
consciousness of a character of said story.
24. (Original) The method according to claim 22, wherein said literary devices are keyed to
said theme.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

7

25. (Original) The method according to claim 1, further comprising:

providing a user interface points at predetermined positions of a sequence of said story generation, such that said user selectively provides an input to constrain an aspect of said story generation.

26. (Currently amended) A computer-implemented method of automatic story generation, comprising:

selecting a theme from a theme database;

using said theme to make further selection of elements of a stage of said story, such that said theme constrains choices for the function of the elements of said stage of said story;

inputting the stage elements into a simulator, said stage elements being appropriately represented for said simulator;

simulating, by said simulator, to generate a sequence of events of said story, each event of said sequence being performed by a selected character of said story, thereby to form a scenario of said story;

in parallel, selecting a story grammar for the story;

expanding said story to one of the paragraph level and the sentence level, depending upon the characteristics in said stage and the theme to influence the expansion of the story; and

linking the expansion of the story to the scenario and inputting each event into a natural language generator, to produce said story in a natural language.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

8

27. (Currently amended) The computer-implemented method according to claim 26, wherein said story grammar is linked to said theme.

28. (Currently amended) The computer-implemented method according to claim 26, wherein said story grammar is selected by said user and randomly selected.

29. (Previously presented) A system for generating a story, comprising:

- means for selecting a theme of said story;
- means for examining elements of said theme and instantiating said theme;
- means for using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events;
- means for inputting said elements of said theme into a stage, said stage being a collection of elements of said story and their interrelationships; and
- means for inputting the stage into a simulation engine to play out a series of events over time, thereby to generate a plot, said plot including characters, their characteristics, and their respective interactions, and a history of events and their temporal relationships, said simulation engine including a predetermined randomness such that random elements from said databases are selected.

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

9

30. (Previously presented) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method of story generation, said method comprising:

selecting a theme of said story;

examining elements of said theme and instantiating said theme;

using said theme to select and control other aspects of the story generation, including a plot of said story which employs knowledge-generated characteristics, relationships, and events;

inputting said elements of said theme into a stage, said stage being a collection of elements of said story and their interrelationships; and

inputting the stage into a simulation engine to play out a series of events over time, thereby to generate a plot, said plot including characters, their characteristics, and their respective interactions, and a history of events and their temporal relationships, said simulation engine including a predetermined randomness such that random elements from said databases are selected.

31. (Original) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method of story generation, said method comprising:

selecting a theme from a theme database;

using said theme to make further selection of elements of a stage of said story, such that said theme constrains choices for the function of the elements of said stage of said story;

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

10

inputting the stage elements into a simulator, said stage elements being appropriately represented for said simulator;

simulating, by said simulator, to generate a sequence of events of said story, each event of said sequence being performed by a selected character of said story, thereby to form a scenario of said story;

in parallel, selecting a story grammar for the story;

expanding said story to one of the paragraph level and the sentence level, depending upon the characteristics in said stage and the theme to influence the expansion of the story; and

linking the expansion of the story to the scenario and inputting each event into a natural language generator, to produce said story in a natural language.

32. (Previously presented) A computer-implemented, theme-based method of creating a story, comprising:

automatically generating, by a computer, a story based on a theme,

wherein elements of the theme of the story are expounded upon in a simulation engine in the computer to further generate a plot of the story which employs knowledge-generated characteristics, relationships, and events;

said method further comprising:

selecting said theme of said story;

examining elements of said theme and instantiating said theme;

U.S. Serial No. 09/471,689
Attorney Docket No. YOR919990507US1
(YOR.153)

11

using said theme to select and control other aspects of the story generation,
including said plot of said story which employs said knowledge-generated characteristics, said
relationships, and said events;

inputting said elements of said theme into a stage, said stage being a collection of
elements of said story and their interrelationships; and

inputting the stage into said simulation engine to play out a series of events over
time, thereby to generate said plot, said plot including characters, their characteristics, and their
respective interactions, and a history of events and their temporal relationships, said simulation
engine including a predetermined randomness such that random elements from said databases are
selected.